<u>Project Manager & Key Staff Standards</u> for Technical Proposals Projects using <u>Level A and/or Level B</u> prequalification disciplines

Project Manager	Project Specific Education, License and Other Requirements (TP Section 5)	Experience On Similar Projects (TP Section 6)	Similar Project Experience (TP Sections 6 & 7)
PROJECT MANAGER	BACHELORS DEGREE NJPE MUST HAVE MANAGED AT LEAST 1 TRANSPORTATION PROJECT OR SERVED AS DEPUTY PROJECT MANAGER FOR 2 TRANSPORTATION	UP TO 6 PROJECTS	OVERALL RESPONSIBILITY FOR PERFORMANCE AND DELIVERY OF THE PROJECT DIRECTLY RESPONSIBLE FOR WORK COORDINATION, STAFF ASSIGNMENTS, BUDGETS, SCHEDULES FOR DELIVERY OF THE FINAL REPORT, STUDY OR DESIGN FOR THE PROJECT
	PROJECTS THROUGH SUBSTANTIAL COMPLETION OF CONSTRUCTION WITHIN THE LAST 10 YEARS • EXPERIENCE IN NJDOT PROCEDURES MANUAL	4 TO 8 YEARS	
Key Staff/ Team Leaders	Project Specific Education, License and Other Requirements (TP Section 9)	Experience On Similar Projects (TP Section 10)	Similar Project Experience (TP Section 10)
ROADWAY DESIGN	BSCE NJPE EXPERIENCE IN NJDOT ROADWAY DESIGN MANUAL	UP TO 6 PROJECTS 4 TO 6 YEARS	GEOMETRIC DESIGN HORIZONTAL AND VERTICAL DESIGN HIGHWAY SECTIONS DESIGN EXCEPTIONS PREPARATION OF TRAFFIC STRIPING PLANS PREPARATION OF CONSTRUCTION STAGING AND MAINTENANCE & PROTECTION OF TRAFFIC PLANS
BRIDGE DESIGN	BSCE NJPE EXPERIENCE IN NJDOT BRIDGES & STRUCTURES DESIGN MANUAL	UP TO 6 PROJECTS 4 TO 6 YEARS	BRIDGE DESIGN LOAD RESISTANCE FACTOR DESIGN (LRFD) BOX CULVERT DESIGN RETAINING WALL DESIGN SIGN STRUCTURE DESIGN
GEOTECHNICAL ENGINEERING	BSCE NJPE EXPERIENCE IN NJDOT BRIDGES & STRUCTURES DESIGN MANUAL	UP TO 6 PROJECTS 3 TO 5 YEARS	FOUNDATION SUBSOIL EXPLORATION PROGRAM PREPARATION OF FOUNDATION REPORT
PAVEMENT DESIGN	BSCE NJPE EXPERIENCE WITH SHRP LTTP DISTRESS IDENTIFICATION MANUAL EXPERIENCE WITH AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES, 1993 OR LATER	UP TO 6 PROJECTS 2 TO 4 YEARS	CONCRETE PAVEMENT REHAB TECHNIQUES SOIL MECHANICS – RESILIENT MODULUS AND SUBSURFACE DRAINAGE SUPERPAVE LEVEL I LIFE CYCLE COST ANALYSIS BACK CALCULATION OF FWD DEFLECTION DATA
HYDRAULICS AND HYDROLOGY	BSCE EXPERIENCE IN DRAINAGE DESIGN (i.e. HEC-I AND HEC-II, TR55, HEC-20 AND HEC-RAS).	UP TO 6 PROJECTS 4 TO 6 YEARS	 HIGHWAY DRAINAGE DESIGN WATER SPREAD CALCULATIONS DESIGN OF RETENTION AND DETENTION BASIN FOR WATER QUALITY FLOOD ROUTING CALCULATIONS SCOUR ANALYSIS FOR BRIDGES BACK WATER ANALYSIS FOR STREAM ENCROACHMENT PERMIT
UTILITY ENGINEERING	BSCE EXPERIENCE IN NJDOT PROCEDURES MANUAL EXPERIENCE WITH STATE UTILITY & RAILROAD ACCOMMODATION POLICY	UP TO 6 PROJECTS 3 TO 5 YEARS	PREPARATION OF UTILITY RELOCATION SCHEMES AND DESIGN-CONSTRUCTION PLANS PREPARATION OF UTILITY AGREEMENT PLANS PREPARATION OF SPECIFICATIONS (SPECIAL PROVISIONS)

<u>Project Manager & Key Staff Standards</u> for Technical Proposals Projects using <u>Level A and/or Level B</u> prequalification disciplines

Key Staff/ Team Leaders	Project Specific Education, License and Other Requirements (TP Section 9)	Experience On Similar Projects	Similar Project Experience (TP Section 10)
SURVEYING AND ROW ENGINEERING	NJ PLS EXPERIENCE WITH NJ MAP FILING LAW FOR ROW MAPPING EXPERIENCE WITH NJDOT SURVEYING MANUAL & STANDARD ARTICLE 44	UP TO 6 PROJECTS 5 TO 7 YEARS	TOPOGRAPHIC SURVEY, BASE LINE SURVEY, PROFILE AND CROSS SECTIONS FOR HIGHWAYS PROPERTY SURVEY FOR R.O.W. MAPPING WRITING A DEED FOR R.O.W. PARCELS
TRAFFIC ENGINEERING	BSCE EXPERIENCE WITH MUTCD EXPERIENCE WITH TRAFFIC SAFETY IN CONSTRUCTION ZONE, HIGHWAY CAPACITY MANUAL EXPERIENCE WITH HIGHWAY CAPACITY ANALYSIS CONTINANT	UP TO 6 PROJECTS	 HIGHWAY CAPACITY ANALYSIS LEVEL OF SERVICE ANALYSIS
	CAPACITY ANALYSIS SOFTWARE HCM, TRANSIT 7F, PASR2, SYNCHRO	3 TO 5 YEARS	
ENVIRONMENTAL SCIENCE	BACHELORS AND/OR MASTERS DEGREE IN ENVIRONMENTAL SCIENCE, ECOLOGY, GEOLOGY, ENGINEERING, BIOLOGY, CHEMICAL OR NATURAL BESOLUTIONS BESOLUTIONS	UP TO 6 PROJECTS	 PREPARATION OF CATEGORICAL EXCLUSION DOCUMENTATION PREPARATION OF ENVIRONMENTAL ASSESSMENTS PREPARATION OF SECTION 4(f) DOCUMENTS
	RESOURCES EXPERIENCE WITH STATE & FEDERAL ENVIRONMENTAL REGS EXPERIENCE WITH NJDOT PROCEDURES MANUAL	5 TO 7 YEARS	 PREPARATION OF EO 215 DOCUMENTS AIR QUALITY ECOLOGY HAZARDOUS WASTE SCREENINGS NOISE
ENVIRONMENTAL - CULTURAL RESOURCES	QUALIFIED IN 36 CFRPART 61 (WHICH NOTES BACHELORS OR MASTERS DEGREE IN ARCHEOLOGY, ANTHROPOLOGY, ARCHITECTURAL)	UP TO 6 PROJECTS	SOCIOECONOMIC AND LAND USE CULTURAL RESOURCES (INCLUDING ARCHEOLOGY AND HISTORIC ARCHITECTURAL SURVEYS AND MITIGATION EFFORTS)
	HISTORY, ART HISTORY, HISTORIC PRESERVATION OR CLOSELY RELATED FIELD)	5 TO 7 YEARS	
ELECTRICAL ENGINEERING	BSEE EXPERIENCE IN CADD - "dgn"	UP TO 6 PROJECTS	TRAFFIC SIGNAL DESIGNHIGHWAY LIGHTING DESIGN
	FORMAT • EXPERIENCE WITH LIGHTING DESIGN SOFTWARE - CALA	2 TO 4 YEARS	
ITS	BSEE (ELECTRICAL OR ELECTRONICS EXPERIENCE WITH DESIGN,	UP TO 6 PROJECTS	DESIGN AND TESTING OF A COMPLETED AND OPERATIONAL ITS SYSTEM, INCLUDING DMS, CCTV, CTSS, AND TRAFFIC DETECTORS
	DEPLOYMENT & OPERATION OF ITS TECHNOLOGIES EXPERIENCE WITH NTCIP STANDARDS	2 TO 5 YEARS	 DATA AND VIDEO COMMUNICATIONS NETWORKS AND SYSTEMS INTEGRATION, INCLUDING FIBER AND WIRELESS SYSTEMS DESIGN OF TRAFFIC MANAGEMENT CENTER
	EXPERIENCE WITH ITS ARCHITECTURES & SYSTEMS ENGINEERING PROCESS		
COMMUNITY INVOLVEMENT	ORGANIZED COMMUNITY OUTREACH EVENTS	2 TO 4 YEARS	RESPONSIBLE FOR PUBLIC INFORMATION CENTERS COMMUNITY OUTREACH
		3 TO 5 YEARS	 MAINTAINING MAILING LISTS & RECORDS OF COMMUNITY OUTREACH PROGRAM CONTEXT SENSITIVE DESIGN (CSD)

<u>Project Manager & Key Staff Standards</u> for Technical Proposals Projects using <u>Level B and/or Level C</u> prequalification disciplines

Project Manager	Project Specific Education, License and Other Requirements	Experience On Similar Projects	Similar Project Experience (TP Sections 6 & 7)
PROJECT MANAGER	(TP Section 5) BACHELORS DEGREE NJPE MUST HAVE MANAGED AT LEAST 2 TRANSPORTATION PROJECTS THROUGH SUBSTANTIAL COMPLETION OF CONSTRUCTION WITH 1 HAVING A CONSTRUCTION COST OF OVER \$15M EXPERIENCE IN NJDOT PROCEDURES MANUAL	UP TO 6 PROJECTS 6 TO 10 YEARS	OVERALL RESPONSIBILITY FOR PERFORMANCE AND DELIVERY OF THE PROJECT DIRECTLY RESPONSIBLE FOR WORK COORDINATION, STAFF ASSIGNMENTS, BUDGETS, SCHEDULES FOR DELIVERY OF THE FINAL REPORT, STUDY OR DESIGN FOR THE PROJECT
Key Staff Team Leaders	Project Specific Education, License and Other Requirements (TP Section 9)	Experience On Similar Projects (TP Section 10)	Similar Project Experience (TP Section 10)
ROADWAY DESIGN	BSCE NJPE EXPERIENCE IN NJDOT ROADWAY DESIGN MANUAL EXPERIENCE IN NJDOT PROCEDURES MANUAL EXPERIENCE WITH INROADS AND MICROSTATION (i. CADD)	UP TO 6 PROJECTS 6 TO 8 YEARS	GEOMETRIC DESIGN HORIZONTAL AND VERTICAL DESIGN HIGHWAY SECTIONS DESIGN EXCEPTIONS PREPARATION OF TRAFFIC STRIPING PLANS PREPARATION OF CONSTRUCTION STAGING AND MAINTENANCE & PROTECTION OF TRAFFIC PLANS
BRIDGE DESIGN	PROGRAMS BSCE NJPE EXPERIENCE IN NJDOT BRIDGES & STRUCTURES DESIGN MANUAL EXPERIENCE IN NJDOT	UP TO 6 PROJECTS 6 TO 8 YEARS	BRIDGE DESIGN LOAD RESISTANCE FACTOR DESIGN (LRFD) BOX CULVERT DESIGN RETAINING WALL DESIGN SIGN STRUCTURE DESIGN
GEOTECHNICAL ENGINEERING	PROCEDURES MANUAL BSCE NJPE EXPERIENCE IN NJDOT BRIDGES & STRUCTURES DESIGN MANUAL EXPERIENCE IN NJDOT PROCEDURES MANUAL	UP TO 6 PROJECTS 3 TO 5 YEARS	FOUNDATION SUBSOIL EXPLORATION PROGRAM PREPARATION OF FOUNDATION REPORT
PAVEMENT DESIGN	BSCE NJPE EXPERIENCE WITH SHRP LTTP DISTRESS IDENTIFICATION MANUAL EXPERIENCE WITH AASHTO GUIDE FOR DESIGN OF	UP TO 6 PROJECTS 6 TO 8 YEARS	CONCRETE PAVEMENT REHAB TECHNIQUES SOIL MECHANICS – RESILIENT MODULUS AND SUBSURFACE DRAINAGE SUPERPAVE LEVEL I LIFE CYCLE COST ANALYSIS BACK CALCULATION ANALYSIS OF FWD DEFLECTION DATA
HYDRAULICS AND HYDROLOGY	PAVEMENT STRUCTURES, 1993 OR LATER BSCE EXPERIENCE IN DRAINAGE DESIGN (i.e. HEC-I AND HEC-II, TR55, HEC-20 AND HEC-RAS).	UP TO 6 PROJECTS 4 TO 6 YEARS	HIGHWAY DRAINAGE DESIGN WATER SPREAD CALCULATIONS DESIGN OF RETENTION AND DETENTION BASIN FOR WATER QUALITY FLOOD ROUTING CALCULATIONS SCOUR ANALYSIS FOR BRIDGES BACK WATER ANALYSIS FOR STREAM ENCROACHMENT PERMIT
UTILITY ENGINEERING	BSCE EXPERIENCE IN NJDOT PROCEDURES MANUAL EXPERIENCE WITH STATE UTILITY & RAILROAD ACCOMMODATION POLICY	UP TO 6 PROJECTS 3 TO 5 YEARS	PREPARATION OF UTILITY RELOCATION SCHEMES AND DESIGN-CONSTRUCTION PLANS PREPARATION OF UTILITY AGREEMENT PLANS PREPARATION OF SPECIFICATIONS (SPECIAL PROVISIONS)

Project Manager & Key Staff Standards for Technical Proposals Projects using Level B and/or Level C prequalification disciplines

Key Staff Team Leaders	Project Specific Education, License and Other Requirements	Experience On Similar Projects	Similar Project Experience (TP Section 10)
ream Leaders	(TP Section 9)	(TP Section 10)	
SURVEYING AND ROW ENGINEERING	NJ PLS EXPERIENCE WITH NJ MAP FILING LAW FOR ROW MAPPING EXPERIENCE WITH NJDOT SURVEYING MANUAL & STANDARD ARTICLE 44 EXPERIENCE IN NJDOT PROCEDURES MANUAL	UP TO 6 PROJECTS	 TOPOGRAPHIC SURVEY, BASE LINE SURVEY, PROFILE AND CROSS SECTIONS FOR HIGHWAYS PROPERTY SURVEY FOR R.O.W. MAPPING WRITING A DEED FOR R.O.W. PARCELS
		5 TO 7 YEARS	
TRAFFIC ENGINEERING	BSCE EXPERIENCE WITH MUTCD EXPERIENCE WITH TRAFFIC SAFETY IN CONSTRUCTION ZONE, HIGHWAY CAPACITY MANUAL	UP TO 6 PROJECTS	 HIGHWAY CAPACITY ANALYSIS LEVEL OF SERVICE ANALYSIS
	MANUAL EXPERIENCE WITH HIGHWAY CAPACITY ANALYSIS SOFTWARE HCM, TRANSIT 7F, PASR2, SYNCHRO	5 TO 7 YEARS	
ENVIRONMENTAL SCIENCE	BACHELORS AND/OR MASTERS DEGREE IN ENVIRONMENTAL SCIENCE, ECOLOGY, GEOLOGY, ENGINEERING, BIOLOGY, CHEMICAL OR NATURAL RESOURCES EXPERIENCE WITH STATE & FEDERAL ENVIRONMENTAL REGS EXPERIENCE WITH NJDOT PROCEDURES MANUAL	UP TO 6 PROJECTS	 PREPARATION OF CATEGORICAL EXCLUSION DOCUMENTATION PREPARATION OF ENVIRONMENTAL ASSESSMENTS PREPARATION OF SECTION 4(f) DOCUMENTS
		5 TO 7 YEARS	 PREPARATION OF EO 215 DOCUMENTS AIR QUALITY ECOLOGY HAZARDOUS WASTE SCREENINGS NOISE SOCIOECONOMIC AND LAND USE
ENVIRONMENTAL - CULTURAL RESOURCES	QUALIFIED IN 36 CFRPART 61 (WHICH NOTES BACHELORS OR MASTERS DEGREE IN ARCHEOLOGY, ANTHROPOLOGY, ARCHITECTURAL HISTORY, ART HISTORY, HISTORIC PRESERVATION OR CLOSELY RELATED FIELD)	UP TO 6 PROJECTS	CULTURAL RESOURCES (INCLUDING ARCHEOLOGY AND HISTORIC ARCHITECTURAL SURVEYS AND MITIGATION EFFORTS)
		5 TO 7 YEARS	
ELECTRICAL ENGINEERING	BSEE EXPERIENCE IN CADD - "dgn" FORMAT	UP TO 6 PROJECTS	TRAFFIC SIGNAL DESIGN HIGHWAY LIGHTING DESIGN MOVEABLE BRIDGE WORK
	EXPERIENCE WITH LIGHTING DESIGN SOFTWARE - CALA	2 TO 4 YEARS	
ITS	Only Level A	Only Level A	Only Level A
COMMUNITY INVOLVEMENT	ORGANIZED COMMUNITY OUTREACH EVENTS	UP TO 6 PROJECTS	 RESPONSIBLE FOR PUBLIC INFORMATION CENTERS COMMUNITY OUTREACH MAINTAINING MAILING LISTS & RECORDS OF
		3 TO 5 YEARS	COMMUNITY OUTREACH PROGRAM CONTEXT SENSITIVE DESIGN (CSD) ESTABLISHING STAKEHOLDER GROUPS